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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,990	07/11/2003	Michael D. Gandrud	P06591US0	4246

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EXAMINER	
LOPEZ, FRANK D	

ART UNIT	PAPER NUMBER
3745	

DATE MAILED: 12/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/617,990	GANDRUD, MICHAEL D.	
	Examiner	Art Unit	
	F. Daniel Lopez	3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *RCE filed 10/3/05*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-5,7-11 and 13-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-5,7-11 and 13-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 3, 2005 has been entered.

Response to Amendment

Applicant's arguments filed October 3, 2005, have been fully considered but they are not deemed to be persuasive.

Applicant's arguments concerning claims 7-11 are the same as the arguments from the last response, and the examiner's position is the same. This position can be found in the last office action.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

Claims 1-6 and 13-18 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 line 5-6 "control valve in at least one of the system pressure lines" and claim 13 lines 5 and 8 "control valve in the...system pressure line" are wrong, since the control valves are only connected to one of the system pressure lines, not **in** it.

In claim 13 line 8 "rate" should be deleted.

Claims not specifically mentioned are indefinite, since they depend from one of the above claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13-15 and 17 are rejected under 35 U.S.C. § 102(b) as being anticipated by Izumi et al (see discussion below).

Claim Rejections - 35 USC § 103

Claims 7-10 are rejected under 35 U.S.C. § 103 as being unpatentable over Gollner in view of Fluid Power Design Handbook. Gollner discloses a loop flushing circuit comprising a hydraulic motor (15) fluidly connected by first and second lines (A, B) to a variable displacement pump (12); a shuttle valve (16) fluidly connected to the motor and to an electrical flow control valve (21); a control means (1) operably connected to the control valve, to open the control valve when pressure in both of the lines is below a threshold pressure (e.g. column 5 line 1-3), in addition to other parameters (e.g. column 4 line 35-50) detected by the control means; wherein the control means is an electrical valve actuator and the control valve is controlled by modulating switch on and switch-off time (e.g. column 5 line 13-16); but does not disclose that the electrical flow control valve is a proportional spool valve.

Fluid Power Design Handbook teaches, that a modulated electrical flow control valve (e.g. discussed on page 82 paragraph 3 and 4) and a proportional spool valve (e.g. discussed on page 82 paragraph 5, and page 84 paragraph 3) are functionally equivalent (e.g. discussed on page 82 paragraph 1).

Since Gollner has a modulated electrical control valve, and since Fluid Power Design Handbook teaches proportional spool valves are functionally equivalent to modulated electrical control valves; it would have been obvious at the time the invention was made to one having ordinary skill in the art to use a proportional spool valve for the control valve of Gollner, as taught by Fluid Power Design Handbook, for the purpose of controlling the amount of fluid flushed from the closed loop.

Claims 7-9 and 11 are rejected under 35 U.S.C. § 103 as being unpatentable over Gollner in view of Fluid Power Design Handbook and Applicant's Admitted Prior Art. Gollner discloses a loop flushing circuit comprising a hydraulic motor (15) fluidly connected by first and second lines (A, B) to a variable displacement pump (12); a shuttle valve (16) fluidly connected to the motor and to an electrical flow control valve (21); a control means (1) operably connected to the control valve, to open the control valve when pressure in both of the lines is below a threshold pressure (e.g. column 5 line 1-3), in addition to other parameters (e.g. column 4 line 35-50) detected by the control means; wherein the control means is an electrical valve actuator and the control valve is controlled by modulating switch on and switch-off time (e.g. column 5 line 13-16); but does not disclose that the electrical flow control valve is a proportional poppet valve.

Fluid Power Design Handbook teaches, that a modulated electrical flow control valve (e.g. discussed on page 82 paragraph 3 and 4) and a proportional spool valve (e.g. discussed on page 82 paragraph 5, and page 84 paragraph 3) are functionally equivalent (e.g. discussed on page 82 paragraph 1).

Applicant's discussion of proportional flow control valves (page 7 last line to page 8 line 1) indicate that proportional poppet valves and proportional spool valves are well known, and therefore is considered admitted by Applicant as functionally equivalent. If proportional poppet valves are not well known (i.e. prior art), it is unclear how they can be made, since applicant has not disclosed how to make them.

Since Gollner has a modulated electrical control valve, since Fluid Power Design Handbook teaches proportional spool valves are functionally equivalent to modulated electrical control valves, and since Applicant's Admitted Prior Art teaches that proportional spool valves and proportional poppot valves are functionally equivalent; it would have been obvious at the time the invention was made to one having ordinary skill in the art to use a proportional poppet valve for the control valve of Gollner, as taught by Fluid Power Design Handbook and Applicant's Admitted Prior Art, for the purpose of controlling the amount of fluid flushed from the closed loop.

Claim 16 is rejected under 35 U.S.C. § 103 as being unpatentable over Izumi et al. Izumi et al discloses a loop flushing circuit comprising a hydraulic motor (2) fluidly connected by first and second lines (including A, B, respectively) to a variable displacement pump (1); first and second poppet type control valves (12, 13, respectively) fluidly connected to respective one of the lines; a control means (19, 20) operably connected to the control valves, to open the control valve when pressure in the one line is low pressure side of the loop; but does not disclose that art least one of the control valves is a spool valve.

Official notice is taken that spool valves and poppet valves can be used interchangeably. It would have been obvious at the time the invention was made to one having ordinary skill in the art to replace the poppet type control valves of Izumi et al with spool type control valves, as a matter of engineering expediency.

Conclusion

Claims 1-5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in this Office action.

Claim 18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

F. Daniel Lopez
Primary Examiner
Art Unit 3745
December 21, 2005